

**Bradford BF 0191(29)
Bridge 1 on VT Route 25B
over the Waits River
Public 502 Informational Hearing**



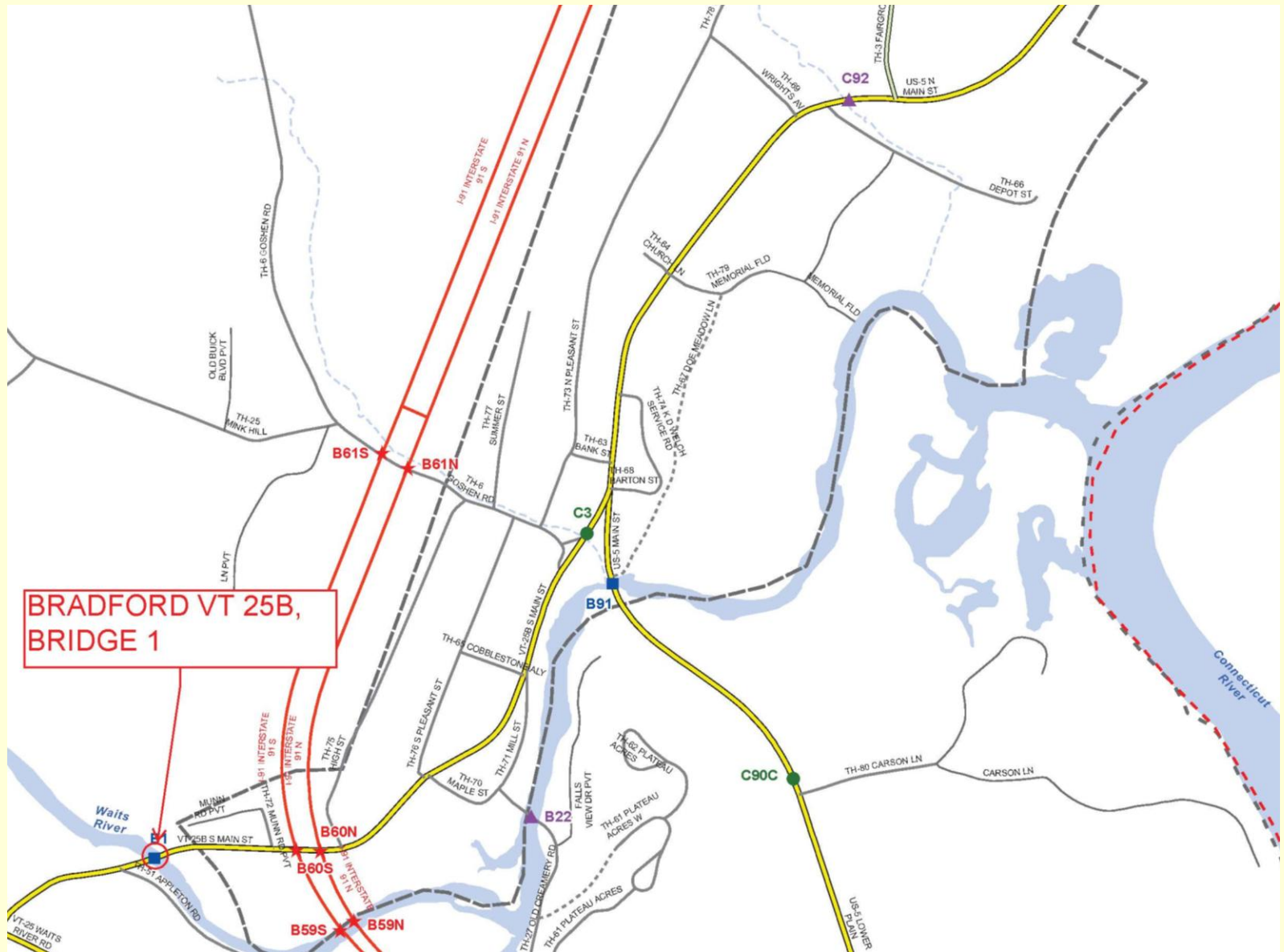
**Presented by
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Meeting Outline

- Purpose of the Meeting
- Existing bridge information
- Proposed project information
- Next Steps
- Questions

PROJECT LOCATION



Purpose of Meeting

- Present the Conceptual plans
- Provide you with the chance to ask questions
- Provide you with the chance to voice concerns
- Build consensus for the proposed project-

Phases of Development

Project
Funded

Project
Defined

Contract
Award

Project Definition

Project Design

Construction

Identify resources &
constraints

Evaluate alternatives

Public Participation

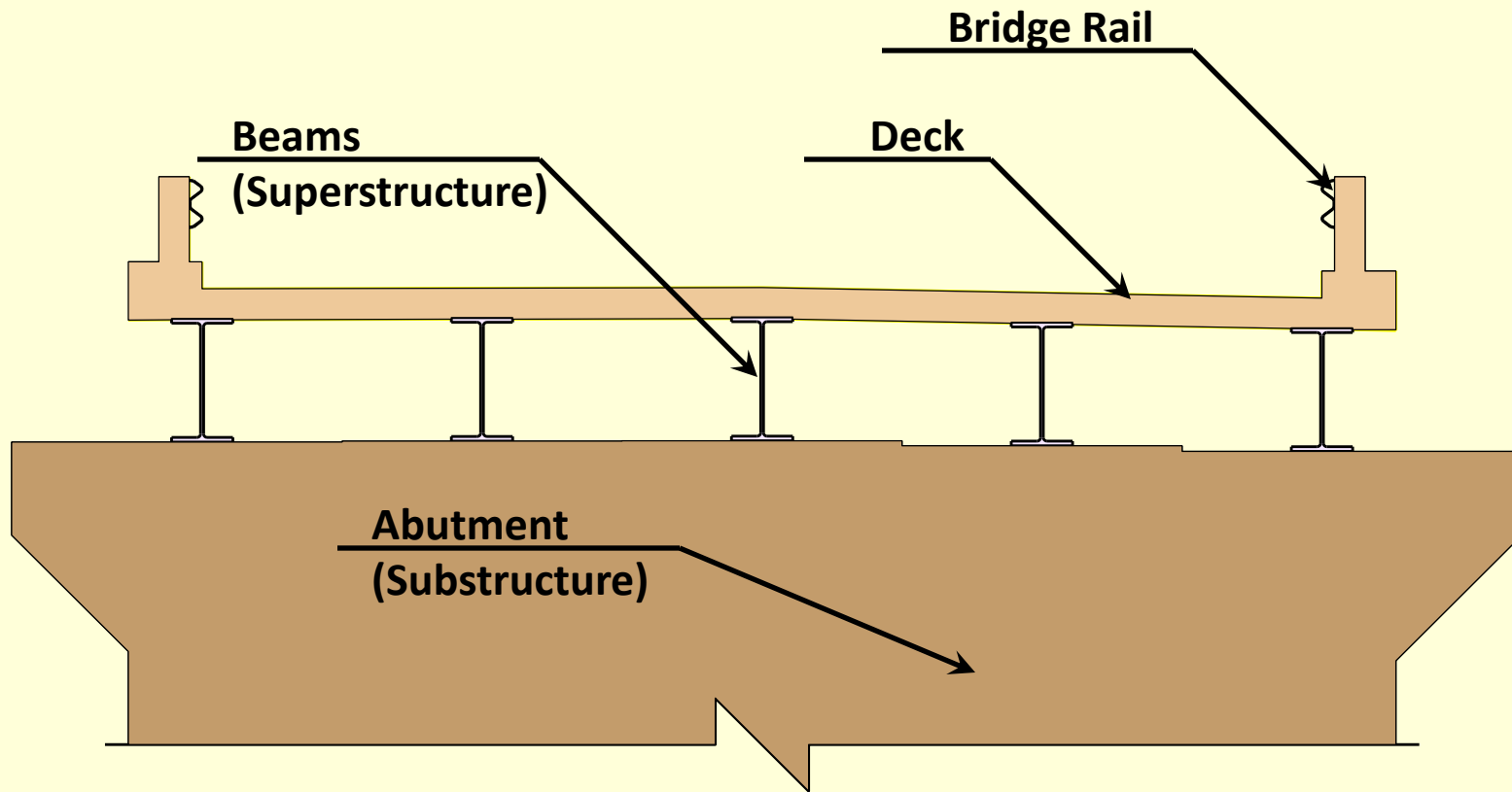
Build Consensus

- Quantify areas of impact

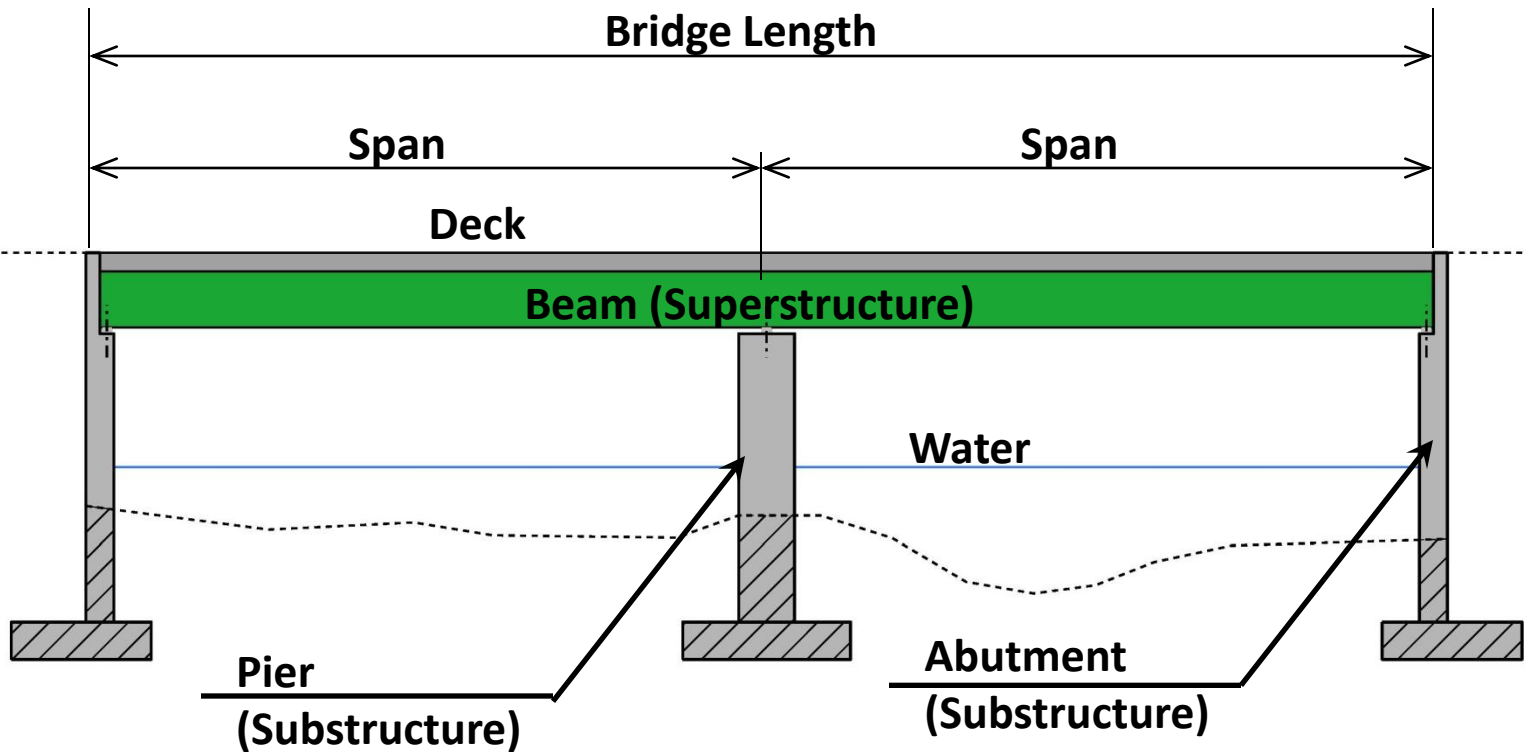
- Environmental permits

- Develop plans, estimate and specifications

Description of Terms Used



More Terms Used



Elevation View of Bridge

Project Background

- The structure is owned and maintained by the State
- Funding will be 80% Federal and 20% State (no local funds)
- Functionally labeled as a Rural Major Collector
- Posted Speed = 50 mph (Design Speed)
- Existing bridge is a three-span steel beam bridge with a concrete deck
- Span length = 159 feet
- Bridge Width = 20.5 feet (curb-curb)
- The bridge was built in 1933 (81 years old)

Traffic Data

	“Current Year” 2016	“Design Year” 2036
Average Annual Daily Traffic	1,400	1,500
Design Hourly Volume	180	190
Average Daily Truck Traffic	140	230
%Trucks	10.7	15.6

EXISTING BRIDGE DEFICIENCIES

Inspection Rating Information (Based on a scale of 9)

Bridge Deck Rating	4 Poor
Superstructure Rating	5 Fair
Substructure Rating	6 Satisfactory

Rating Definitions

9 Excellent
8 Very Good
7 Good
6 Satisfactory
5 Fair
4 Poor
3 Serious
2 Critical
1 Imminent Failure

Deficiencies

- The deck is in poor condition with severe deterioration
- The bridge and approaches are too narrow for the roadway classification and design speed
- The bridge railing is substandard
- The bridge is “scour critical” and the pier has scour issues
- The alignment (K value and Stopping Sight Distance) is substandard

Looking east over Bridge



Looking west over Bridge



Bridge Fascia upstream



West Abutment and abandoned utility line



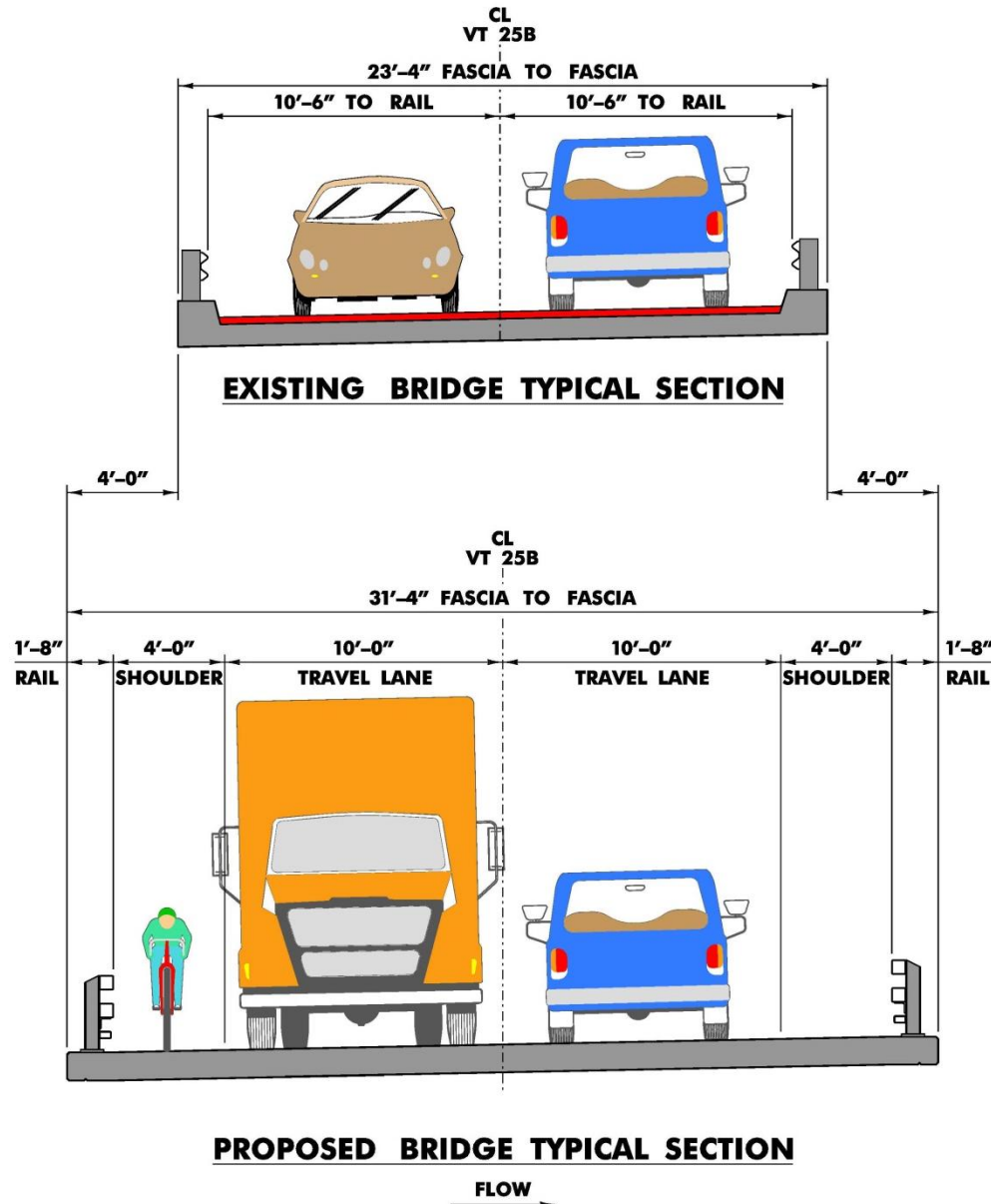
Bottom of Deck showing delamination



Proposed Project

- Complete bridge replacement warranted
- Use 10' lanes and 4' shoulders (28' rail-rail width)
- Use 147' single span bridge
- Majority of bridge will be on curve
- Maintain existing centerline of road
- Improve banking of road
- Raise grade of road to improve hydraulics

Bridge Typical



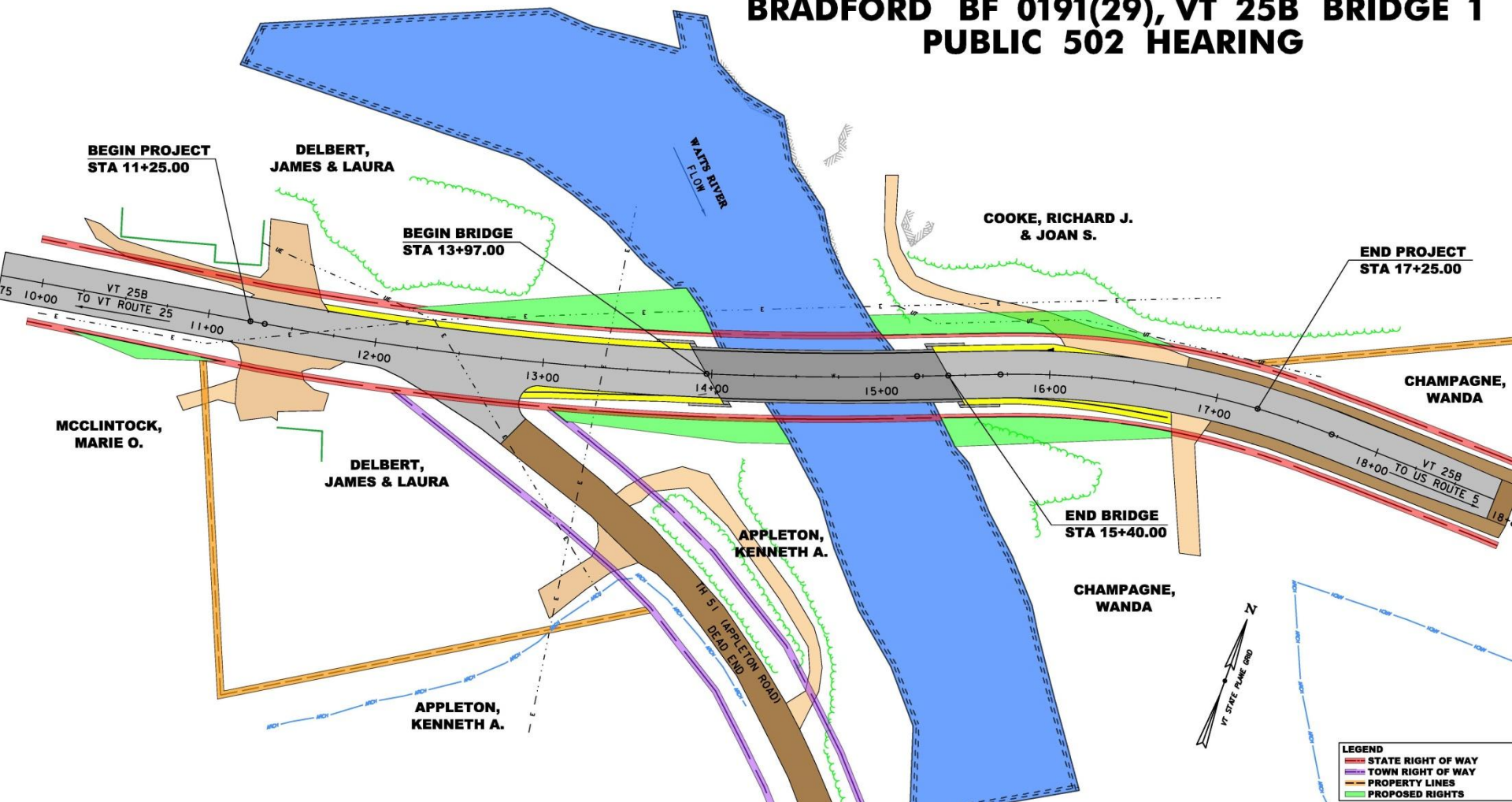
PROPOSED VT 25B TYPICAL SECTION

The diagram illustrates the proposed cross-section of VT 25B. It features a central travel lane of 10'-0" width, flanked by 4'-0" shoulders. The total width of the travel lane and shoulders is 18'-0". The subbase consists of 24" of dense graded crushed stone, topped with a 6 1/2" layer of bituminous concrete pavement. A 12" sand borrow layer is shown beneath the subbase. The clear zone (cut) is 12'-0" wide, and the clear zone (fill) is 14'-0" wide. The diagram also shows a 2'-0" shoulder and 10'-0" travel lanes for the existing section.

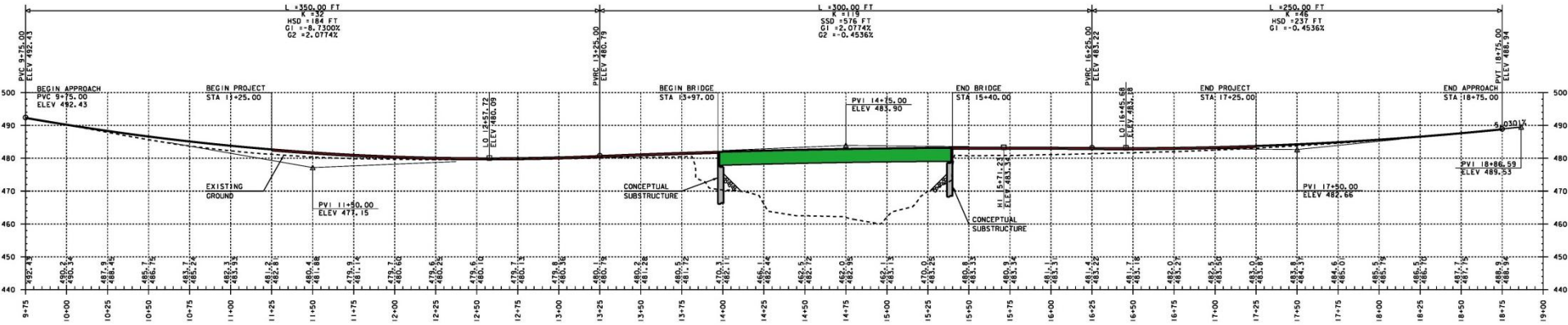
PROPOSED VT 25B TYPICAL SECTION

Proposed Layout

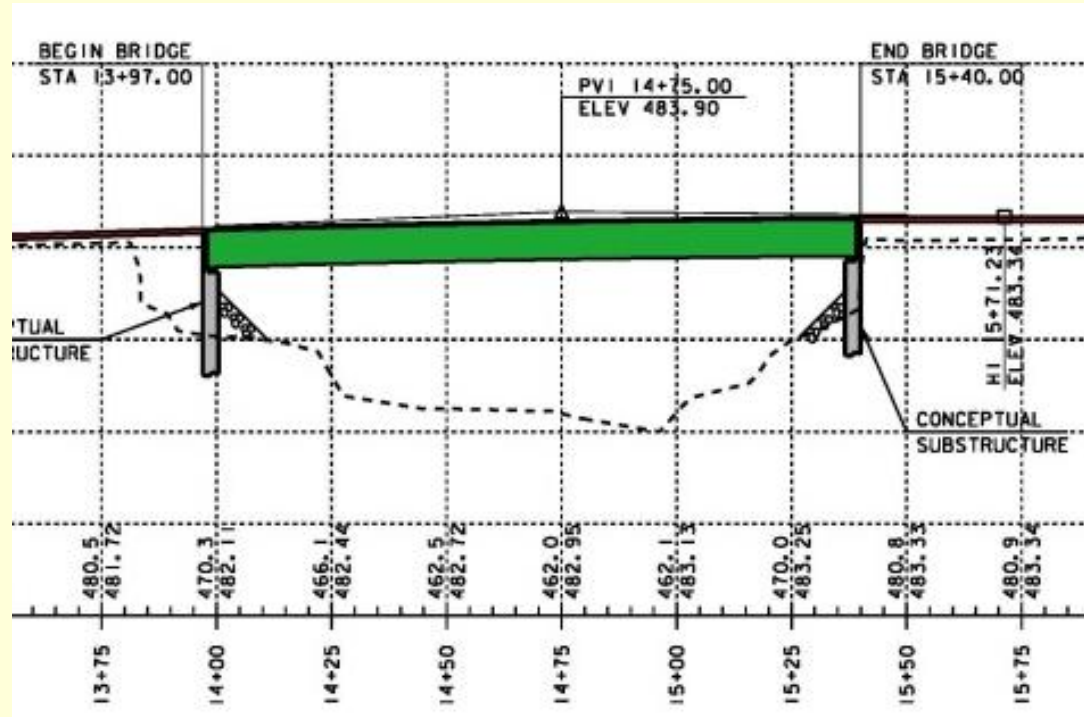
BRADFORD BF 0191(29), VT 25B BRIDGE 1 PUBLIC 502 HEARING



Proposed Profile



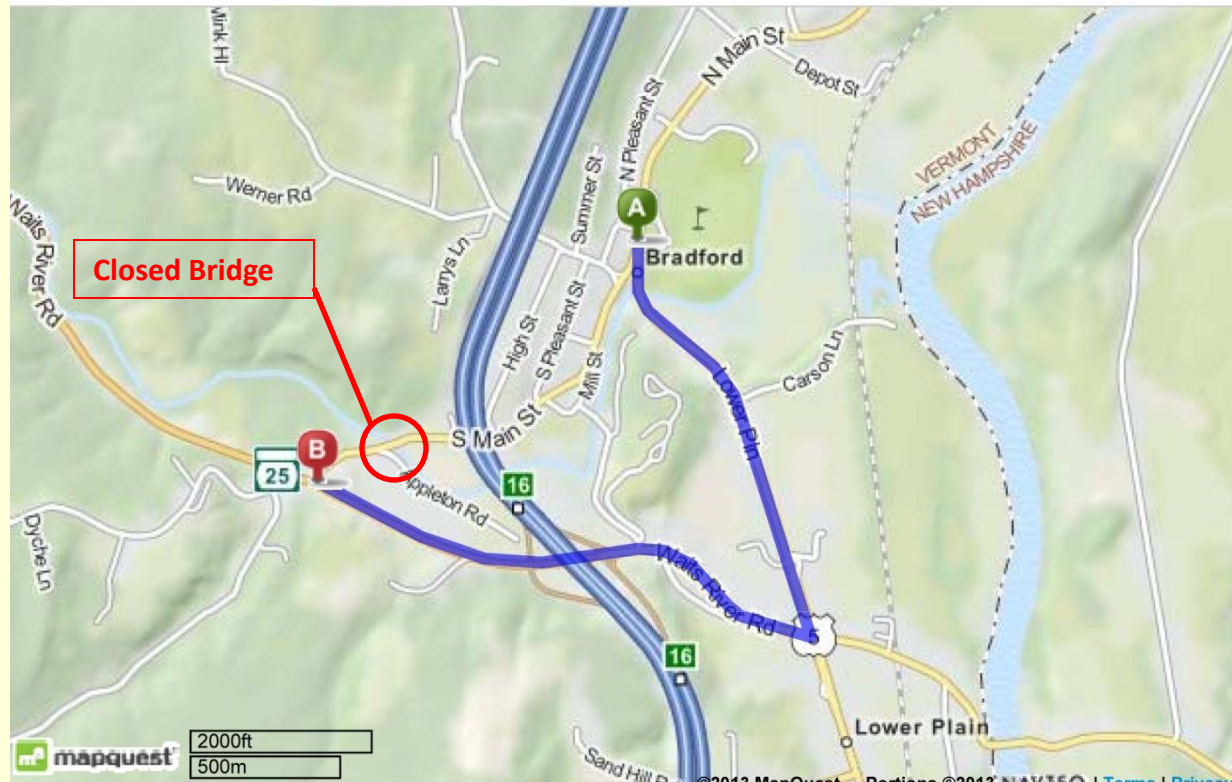
Enlarged view of bridge



Accelerated Bridge Construction with Bridge Closure Details

- Bridge 1 to be closed for 8 weeks
- Allow 24/7 construction during bridge closure
- Contract incentives/dis-incentives to encourage contractor
- Contractor will receive more \$ if closure is less than stated in the contract
- Community would have input on time of closure (between June 1 and September 1)
- Detour would be on State highways
- Public Outreach to provide advance notice for planning
- Local bypass routes would not be considered detour route -

Detour Route



A to B on Thru Route: 1.0 Miles
A to B on Detour Route: 2.0 Miles
Added Miles: 1.0 Miles
End to End Distance: 3.0 Miles

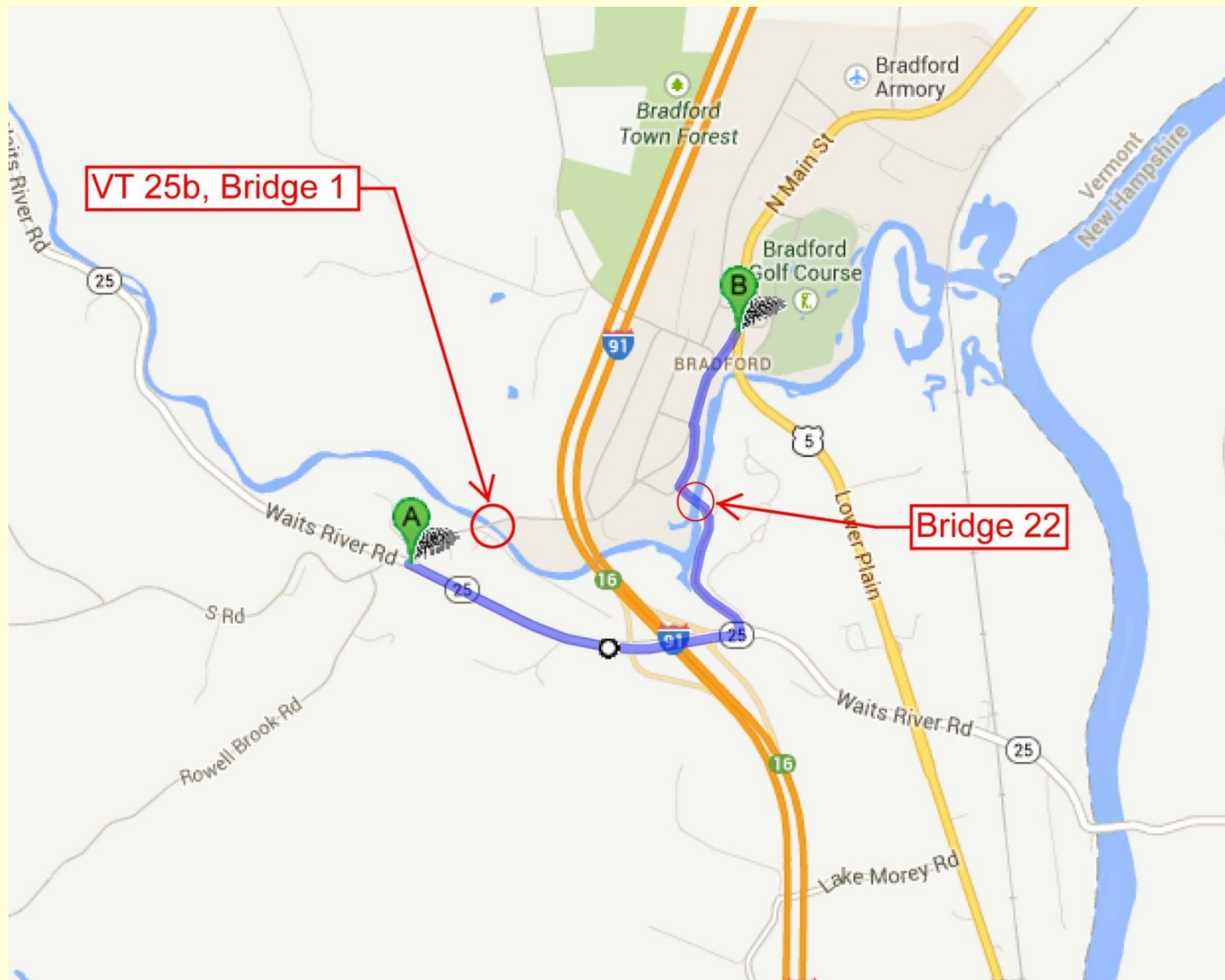
Major Factors

Added Miles: 1.0
End to End Miles: 3.0
Traffic Volume: 1,400 vpd
Duration: 8 weeks

Local Bypass Details

- No local routes would be appropriate for the detour route
- Local bypass route would not be considered the detour route
- State would not add signing on any local roads
- Route could be used for emergency response as appropriate
- We are in the process of developing a way to fairly and consistently compensate Towns for impacts due to increased traffic on bypass routes
- Compensation amount would mitigate for:
 - Providing police presence to deter speeding
 - Providing enforcement to enforce weight limits
 - Dust control (where applicable)
 - Roadway Maintenance

Local Bypass Map



Scope - Cost - Schedule

The project cost and schedule can not be determined until the scope of the project is clearly defined.

Preliminary Engineering (w/ Scoping)	\$ 550,000
Right-of-Way	\$ 215,000
Construction w/ CE and Contingencies	\$2,136,000
Total	\$2,901,000

- Construction is currently scheduled for 2019
- Many factors can effect construction year
- Construction year is assuming Federal & State funding is available (project is funded 80% Fed – 20% State)

Next Steps

This is a list of a few important activities expected in the near future and is not a complete list of activities.

- Consider comments received at Public Meeting
- Provide written response to Town with decisions
- PROJECT DEFINED
- Develop Preliminary Plans
- Environmental permitting process
- Meet with adjacent property owners
- Right-of-Way acquisition process
- Final design details

Questions



Direct any questions to:

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**This presentation is available at the
web address shown below**

<https://outside.vermont.gov/agency/vtrans/external/Projects/Structures/13C054>